

An Open Letter to Save Thottappally- Spillway- (Part-1)

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Background

The Thottappally Spillway commissioned in 1958 was designed to drain floodwaters from Pamba, Achancovil, and Manimala rivers directly into the Arabian Sea, thereby protecting the Kuttanad polders and enabling a multi-crop paddy and other cultivations. Over the decades, the spillway has underperformed due to a number of reasons; Sandbar formation at the Pozhy mouth, Inadequate width and meandering of the leading channel, and Shutter deterioration (partially replaced in 2017). A decade ago, a modernisation DPR of ₹47 crore was approved in 2014 and submitted for Central assistance under Flood Management Programme (FMP), but no Union funds have been released to date. Alongside, cumulative state expenditures of ₹8.25 crore up to March 2019 (for shutters & partial dredging), and an additional ₹5 crore earmarked in the 2023-24 Budget. And fresh surveys / soil testing (2025) has been underway for expansion and for possible new spillway construction. It is argued here that the modernisation of Thottappally Spillway & Leading Channel needs an approval for the State-first financing and expeditious implementation rather than waiting for central funds releases, the later can be adjusted as it comes in due course. A decade over long wait for Central Clearances is a serious malady to be done away with. Besides what has been progressing with the other public funds placed on are probed. Over a decade along (2014-2025) what has been the story of this critical construct is a well-meant concern. Let this OPEN LETTER help Save Kuttanad.

Core Proposals

Given continued flooding and the urgency of Kuttanad's livelihood protection, it is proposed here that; (i). The State Government approve in principle a State-First Financing of the works, without awaiting Union Governments sanction; (ii). Execution be phased as follows: - Phase I (₹47 crore) for completion of DPR components, channel dredging, padasekharam support works, sandbar removal; and Phase II (₹40–₹70 crore) for permanent sea-mouth training works (groynes/guide bunds), channel widening & straightening, shutter automation, and creation of a maintenance corpus; (iii). Permissions to be secured in parallel for CRZ clearance from KCZMA and Concurrence from State Wetland Authority Kerala (SWAK) under Wetland Rules, 2017, as the site falls within the Vembanad-Kol Ramsar Wetland; (iv). Technical model studies to be commissioned through CWRDM/IIT to finalise coastal training works and lastly (v). A multi-stakeholder committee (WRD, Agriculture, Fisheries, Panchayats, NGOs) to oversee implementation and O& M be formed.

Financial Implications

Overall, the total indicative outlay needed are ₹90–₹125 crores for over 2–3 financial years. The Funding sources can be State Plan / KIIFB; with provision to adjust against any future Union Government's reimbursements under FMP or other related schemes; an O&M Corpus and a dedicated provision for annual sandbar management and dredging.

Why the Permissions are Crucial

Let us give a **clear, factual assessment** of why the **CRZ and Wetland Permissions** are both crucial and difficult, and why they have delayed the Thottappally modernisation.

CRZ Clearance (KCZMA)

- The Coastal Regulation Zone (CRZ) Notification, 2011/2019 strictly regulates construction, dredging, groyne building, and any physical intervention within 500 metres of the High Tide Line (HTL) and in tidal water bodies;
- The Thottappally Pozhy mouth and leading channel are part of this CRZ-I sensitive zone;
- Works proposed are sandbar cutting, dredging, groyne/guide bund construction, bank protection, all require prior CRZ clearance;
- Without clearance, any construction risks being struck down by the National Green Tribunal (NGT) on petition, as has already happened in other Kerala cases.

Wetland Concurrence (SWAK)

- The Vembanad-Kol wetland is a Ramsar site protected under the Wetlands (Conservation & Management) Rules, 2017;
- Any project within this notified wetland must obtain approval from the State Wetland Authority Kerala (SWAK), which ensures that interventions are consistent with the Integrated Management Plan (IMP) prepared for Vembanad;
- This is to safeguard ecological balance (salinity, fishery habitats, invasive weed management); and
- Failure to get concurrence, risks international reporting issues (India has Ramsar obligations) and potential legal injunctions.

Why They Are Difficult to Obtain

- **Overlapping Mandates:** KCZMA and SWAK both claim jurisdiction; KCZMA for coastal engineering, SWAK for wetland ecology. This causes file movements back and forth.
- **Incomplete DPRs:** The DPRs submitted by Kerala (2014 onwards) often focus on engineering design but lack full environmental impact modelling (salinity changes, fisheries impact). So, committees then send back these for “clarifications”.
- **NGT Scrutiny:** Kerala projects in coastal wetlands (e.g., port dredging, bypass works) face heightened judicial scrutiny. Officers thus avoid “fast-track” clearance for fear of legal censure.
- **Stakeholder Objections:** Fisher groups and NGOs have formally objected to interventions, citing loss of fish breeding grounds. Their objections trigger additional appraisal rounds.

Efforts Protracted

- **2013–14:** Kerala WRD initiated modernization DPR, included shutters + dredging.
- **2014–17:** Some shutters were replaced using State funds, without waiting for full CRZ clearance (maintenance works are exempt);
- **2017–2019:** Kerala Planning Board noted that dredging and mouth works could not proceed fully because CRZ permission was pending; WRD had submitted proposals to KCZMA, but CRZ appraisal asked for fresh hydrodynamic modelling;
- **2019–2022:** Kerala applied to SWAK for concurrence; file was returned asking for alignment with the Integrated Management Plan of Vembanad;
- **2023:** State Budget earmarked ₹5 cr, but utilisation stalled due to clearance delays;
- **2025:** Soil testing and new survey announced; this is preparatory to a fresh CRZ/Wetland application, indicating earlier efforts had not been fully successful.

Why the Delays Continue

- **Lack of a Unified Application:** WRD has so far filed piecemeal proposals (e.g., shutter replacement vs dredging vs padasekharam works). KCZMA and SWAK demand a composite application covering all interventions;

- **Capacity Gaps:** WRD relies on consultants but has not yet produced a full Environmental Impact Assessment (EIA) with hydrodynamic modelling, but a key requirement for CRZ;
- **Coordination Deficit:** SWAK (chaired by Chief Secretary) and KCZMA (under Environment Dept.) operate separately; WRD has not convened a joint clearance pathway;
- **Accountability Diffusion:** No single officer / agency owns the task of securing both permissions; responsibility is split across WRD, Environment Dept., and Planning Board;

Who is Responsible for the Delays?

- **Primary Responsibility:** - Water Resources Department (WRD) for not filing a complete, technically robust CRZ/Wetland proposal in one go;
- **Contributory Responsibility:** - (i). KCZMA for returning files multiple times instead of facilitating a joint solution; (ii). SWAK for insisting on strict adherence to the Vembanad Integrated Plan, but not providing handholding support to align; and the State Government Coordinators, for failing to appoint a single empowered nodal officer to drive clearances through both bodies.

What Needs to be Done Now

- **Prepare a composite DPR** (engineering + ecological modelling) and file a **single-window application** to both KCZMA & SWAK.
- **Appoint a nodal officer** in WRD at Secretary level to shepherd the file through both authorities.
- **Constitute a joint technical committee** (WRD, KCZMA, SWAK, CWRDM, fisher & farmer representatives) to vet the plan before formal clearance, avoiding repetitive rejections.
- **Use external expertise** (IIT Madras, NIOT, CWRDM) to prepare the hydrodynamic and ecological impact studies as demanded.
- **Set timelines:** 90 days for KCZMA, 60 days for SWAK once full proposal is filed.

In short: Past experience shows that getting these permissions in Kerala's water-rich and ecologically very sensitive areas is almost always slow, contested, and documentation-heavy. But delays arise not only from regulators' caution but also from weak state submissions and active stakeholder objections.
